

# **CUSTOMER CREDIT RENEWABLE RESOURCES ACCOUNT: REPORT TO THE GOVERNOR AND THE LEGISLATURE**

**STAFF DRAFT**

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**Disclaimer**

This report was prepared by the California Energy Commission staff. Opinions, conclusions and findings expressed in this report are those of the authors. The report does not represent the official position of the Energy Commission until adopted at a public meeting.

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# **Customer Credit Renewable Resources Account Report to the Governor and the Legislature**

## **Introduction**

In this report, the staff of the California Energy Commission (Energy Commission) presents its evaluation of the Customer Credit program, along with recommendations, which is required by Senate Bill 1038 (SB 1038, Sher, Chapter 515, Statutes of 2002). SB 1038 allocates 10 percent or \$13.5 million annually of the funds collected for the Renewable Energy Program (REP) for customer credits to support customer-driven demand for renewable energy in California.

This report evaluates whether or not to continue implementing a Customer Credit program that was in place from 1998 through 2001. The previous Customer Credit program was designed to provide ongoing support of new and existing renewable energy generation in California by helping to stimulate market demand and establish the market infrastructure to facilitate the sale of renewable energy in a competitive, direct access, electricity marketplace.

The Energy Commission staff submits the following report and recommendations for public consideration and comment. With the change in the market structure in California, suspension of direct access, and the advent of the California Renewables Portfolio Standard (RPS) Program, the Legislature has asked the Energy Commission to evaluate the Customer Credit program. The questions that arise are whether the Account can still serve its purpose in its current form, whether it would better serve its purpose with adjustments, or whether it should be discontinued and the funds used for other purposes.

## **Staff Recommendations**

The Energy Commission REP staff has examined the history of the Customer Credit program and considered the numerous uncertainties surrounding the direct access market in California, now driven by the RPS. The staff finds no compelling basis for concluding that continued Customer Credit funding can or will produce a significant impact on renewable energy development outside of utility procurement. The staff recommends the following actions with respect to the Customer Credit program:

- Approve retroactive payments to eligible residential and small commercial customers, for the period January 1, 2002 through April 1 2003, at the incentive rate 1¢/kWh. The payments should be made from unused REP funds, authorized under Senate Bill 90 (SB 90, Sher, Chapter 905, Statutes of 1997).

- Discontinue the Customer Credit program, given uncertainties, complexity of issues and timing of RPS implementation, and reallocate annual funding for this program (\$13.5 million), effective January 1, 2002, as follows:
  - 10% (\$1.35 million) to Renewable Resources Consumer Education Account
  - 45% (\$6.08 million) to Emerging Renewable Resources Account
  - 45% (\$6.08 million) to New Renewable Resources Account
- Set aside funds within the Consumer Education Account to support and accelerate the scoping, design and development efforts for the required RPS/REP generation tracking, verification, and accounting system (including consideration of a certificate-based system), consistent with SB 1078 and REP requirements.

## Report Organization

This report summarizes the research and analysis performed by staff and the REP's technical consultants, the XENERGY Contracting Team. The report is organized into the following chapters:

- Chapter 1: Customer Credits and the Renewable Energy Program
- Chapter 2: Status and Trends in Renewable Energy Markets
- Chapter 3: Scenarios, Options, and Recommendations

Chapter 1 provides an overview of the Customer Credit program since its inception, summarizing recent legislation covering both the REP and the Customer Credit Program, including SB 1038. Chapter 2 examines trends in renewable energy markets and the role of customer credits in these markets, focusing on California's direct access market, implementing the RPS in California, and the trading of renewable energy certificates nationally. Chapter 3 provides the staff's assessment of options for effectively using customer credit funding in the context of the changing market structure and rules for renewable energy suppliers and customers.

Appendix 1 contains the XENERGY Contracting Team's report, *Customer Credit Account Research and Analysis Supporting the California's Renewable Energy Program Preparation of the Customer Credit Account Report for the Legislature*, compiling its research and analysis. The consultant report provides the information base for much of Chapter 2. To keep printing costs down, the XENERGY report is available on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)]. Appendix 2 is a copy of a March 8, 2002 Energy Commission staff letter to participants of the Customer Credit program.

# CHAPTER 1 Customer Credits and the Renewable Energy Program

This chapter summarizes the legislation covering the REP generally and the Customer Credit program specifically, focusing on recent legislative changes to the programs in 2002. In addition, this chapter summarizes the SB 1038 requirements and the Customer Credit program activities since 1998.

## Legislative Background

The Renewable Energy Program was initially authorized through Assembly Bill 1890 (AB 1890, Brulte, Chapter 854, Statutes of 1996). AB 1890 required California's three major investor-owned utilities (IOUs) to collect \$540 million from their ratepayers over a four-year period, beginning in 1998, to help support renewable electricity-generation technologies and develop a renewable energy market in California.

Senate Bill 90 (SB 90, Sher, Chapter 905, Statutes of 1997) established the Renewable Resource Trust Fund (RRTF) and directed the Energy Commission to distribute the funds through four distinct accounts as follows:

- Existing Renewable Resources Account
- New Renewable Resources Account
- Emerging Renewable Resources Account
- Customer-Side Renewable Resource Purchases Account (this Account was bifurcated into two sub-accounts: Customer Credit and Consumer Education Subaccounts)

Each of the REP accounts was fashioned to support the renewables industry in a unique way during the four-year transitional period envisioned in AB 1890 and SB 90.

More recent statutes that have significantly affected the REP and Customer Credit Program are summarized below:

- In September 2000, the Legislature adopted the Reliable Electric Service Investments Act (RESIA) through Assembly Bill 995 (AB 995, Wright, Chapter 1051, Statutes of 2000) and Senate Bill 1194 (SB 1194, Sher, Chapter 1050, Statutes of 2000). The RESIA extended the collection of funds for renewable energy incentives starting at \$135 million per year in 2002, and directed the Energy Commission to develop an Investment Plan for utilizing these funds for the first five years of their collection.
- In June 2001, pursuant to the RESIA, the Energy Commission recommended funding allocations and mechanisms to the Legislature in a report titled, *Investing in Renewable Electricity Generation in California (Investment Plan)*<sup>1</sup>.

- Assembly Bill 1724 (AB 1724, Pavley, Chapter 774, Statutes of 2001,) deleted provisions that public entities may not receive customer credits. Instead, the Energy Commission established a cap on the aggregate amount that may be awarded to public entities.
- Senate Bill 1078 (SB 1078, Sher, Chapter 516, Statutes of 2002) was enacted in September 2002, establishing a renewables portfolio standard in California. SB 1078 requires the investor-owned utilities to increase their procurement of renewable energy resources by at least one- percent per year so that 20 percent of their retail sales are from eligible renewables by 2017. The Energy Commission must, pursuant to SB 1078, develop eligibility requirements for certifying renewable facilities, create a system for tracking renewable energy purchases and sales, verify utility procurement compliance, and cover a determined above-market cost for renewables purchases by utilities<sup>2</sup>. The Energy Commission is collaborating with the California Public Utilities Commission (CPUC) and other agencies to implement the RPS under SB 1078.
- SB 1038 incorporated the *Investment Plan* and authorizes the Energy Commission to continue implementing the REP for the next five years and to distribute the RRTF monies collected under the RESIA, beginning in 2003. Provisions of SB 1038 are discussed in more detail below.

## SB 1038 Program Requirements

The current REP began January 1, 2003, when SB 1038 took effect. SB 1038 generally incorporated the recommendations in the *Investment Plan* regarding the REP and customer credits by reference. SB 1038 allocates ten percent of the funds collected under RESIA for the Customer Credit Renewable Resources Account, which are to be used to provide incentives to customers who entered into a direct access transaction on or before September 20, 2001, for purchases of electricity produced by registered, in-state, renewable electricity generating facilities.

SB 1038 specifically requires that:

- Customer credits are to be awarded to California retail customers located in the service territories of electrical corporations subject to the collection of RESIA funds under Public Utilities Code Section 381.
- Customers must be purchasing eligible electricity through direct access transactions that are traceable by an auditable contract trail or equivalent, providing commercial verification that the renewable attribute has been sold once and only once to a retail customer.
- Credits may not exceed 1.5 cents/kWh, and each non-residential/non-small commercial customers is capped at \$1,000/year, and as a class, they may not receive more than 20 percent of the total funds allocated to the Account (a cumulative total of \$13.5 million for the first five years - \$2.7 million annually).
- Customer credits may not be awarded to purchase electricity that is used to meet the obligations of a renewables portfolio standard.

SB 1038 also requires the Energy Commission to submit a report to the Governor and Legislature on how to use the incentive funds currently allocated for customer credits most effectively. The Energy Commission has decided not to implement the Customer Credit program until it submits this report to the Legislature. Specifically, the statute requires the following:

By March 31, 2003, the Energy Commission shall report to the Governor and the Legislature on how to most effectively utilize the funds for customer credits, including whether, and under what conditions, the program should be continued. The report shall include an examination of trends in markets for renewable energy, including the trading of non-energy attributes, and the role of customer credits in these markets. The report will recommend an appropriate funding allocation for the customer credits and how implementation of the customer credits should be structured, if appropriate.  
[Public Utilities Code Section 383.5 (f)(2)(E)]

## **The Customer Credit Subaccount: 1998-2001**

This section discusses the Customer Credit program activities and status through the end of 2001, summarizing and updating the more detailed accounting provided in the December 2002 *Annual Project Activity Report to the Legislature* and similar reports from 2001 and 2000<sup>3</sup>. This summary includes a discussion of the changes in the market rules for direct access contracts, the number of customers, products, and providers, and the distribution of funds over the four years. *Volume 4: Customer Credit Subaccount Guidebook (Sixth Edition)*<sup>4</sup>, contains the guidelines that governed customer credit eligibility and funding at the end of 2001.

Under SB 90, the Customer Credit Subaccount (Subaccount) was designed to reduce the cost premium that customers paid for renewable energy and thus stimulate market demand for renewable energy, simultaneously helping to build the renewable market infrastructure to facilitate consumer choice. The \$75.6 million allocated to the Subaccount under SB 90 was designed to stimulate market demand by offering financial incentives to consumers via renewable energy providers. By passing the customer credit along to their customers, eligible renewable providers could compete with conventional electricity providers. The program involved many players, including direct access customers, electric service providers (ESPs), and renewable energy generators and wholesalers.

The customer credit was essentially a financial incentive in cents/kWh for eligible renewable electricity purchases. The Energy Commission distributed available funds to providers who delivered eligible energy to qualifying customers. The ESPs passed these funds on to their customers, based on the customer's electricity consumption. Eligible customers were to reside within the investor-owned utility service territories of Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), or Bear Valley Electric Service Company. The only eligible customers were those

who participated in the direct access market and purchased energy from a registered renewable provider instead of their default utility distribution company.

To become eligible for the customer credit, ESPs registered themselves and their eligible products with the Energy Commission. A renewable energy product was typically a mix of renewable energy and generic or system power, with only in-state renewable generation eligible for the customer credit.<sup>5</sup> Wholesalers or power pools could also register with the Energy Commission to become registered renewable wholesalers and sell electricity to eligible providers, although they were not eligible for funding.<sup>6</sup>

Customers were categorized into three separate classes: 1) residential, 2) small commercial, and 3) non-residential, non-small commercial. Non-residential, non-small commercial customers, referred to as “large customers,” include large commercial, industrial, agricultural, and public lighting customers.

The large customers were subject to a cap of \$1,000 per customer per year and collectively a \$15 million cap for cumulative payments from the Subaccount over the duration of the program. The \$15 million cap was reached in April 2001, ending the availability of funding for these large customers.

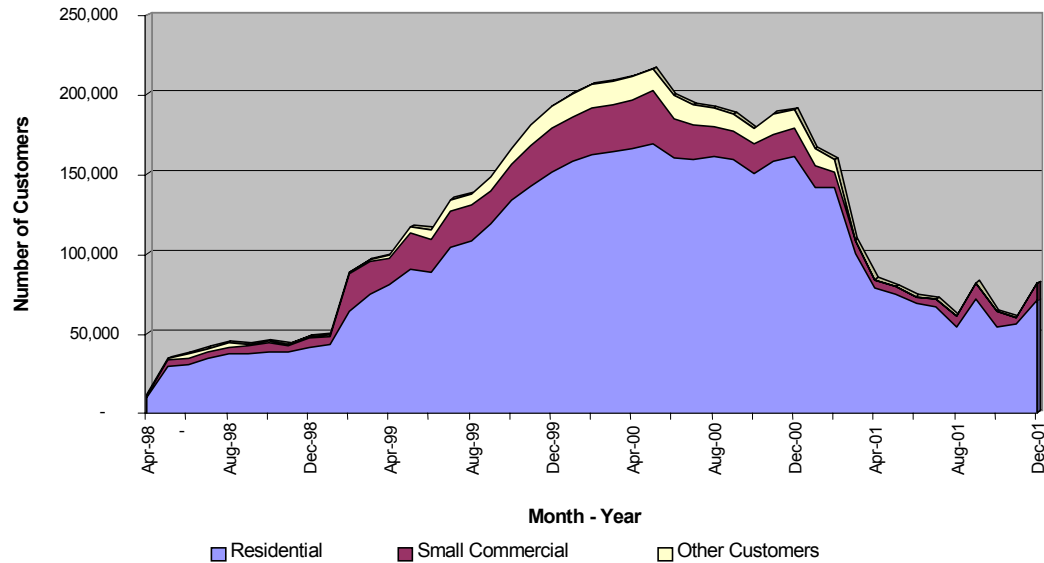
The Energy Commission made monthly payments from the Customer Credit Subaccount to registered renewable providers based on data submitted in Monthly Performance Reports (MPRs). The MPRs included data on the generation source of energy offered by providers and on sales to customers.

The customer credit mechanism was intended to provide renewable energy providers and marketers with a high level of flexibility in determining how best to develop the renewable energy market, increasing their ability to attract customers. Suppliers and providers had the freedom to use co-op structures, marketing agents, or other innovative approaches for selling renewable power, such as green tags or renewable energy certificates.

## **Number of Customers and Providers**

Comparing the number of customers purchasing electricity from registered renewable providers with the number of customers choosing direct access is a useful measure of Subaccount activity. Customer participation in the direct access market has been limited since its inception in April 1998, peaking in March of 2000 with a total of 223,445 customers. Only 2.2 percent of all customers who had the option to choose direct access did so. However, 92 percent of those direct access customers were purchasing electricity that qualified for the customer credit.

By August 2000, essentially all direct access customers were purchasing energy that qualified for customer credits. Figure 1 shows the total number of customers receiving the customer credit from 1998 through 2001. The market peaked in the spring of 2000, with the number of customers purchasing renewable energy hitting a high of 216,372 customers in May 2000 and purchasing a record 261,717,866 kWh in August 2000.



**Figure 1**  
**Number of Customers by Customer Class**

One year later, in 2001, less than 71,000 residential customers were being served by registered electric service providers and receiving customer credits, demonstrating the large impact of the market disruption caused by the high electricity prices and regulatory uncertainty beginning in late 2000, ultimately leading to suspension of direct access.

At the end of 2001, a total of 29 providers offering 48 registered renewable energy products were participating in the customer credit program. The number of registered providers, compared to the number of registered providers who are actively serving customers, is an important indicator of market activity. Providers can maintain registration status without actively serving customers, as illustrated in Table 1.1.

**Table 1.1**  
**Registered and Active Renewable Providers**

Year Ending	Number of Registered Providers	Number of Providers Active in Market
December 1998	13	3
December 1999	21	11
December 2000	29	18
December 2001	29	5

As of December 2001, when payments from the Subaccount were suspended, five providers were active, although most had returned a large portion of their customer base and energy load to the default utility by that time. Renewable providers left the market for a variety of reasons, stemming from the high wholesale energy prices experienced at the end of 2000 and the manner in which these high prices were factored into pricing policies for the direct access and bundled service markets. Some providers also left the market, or returned some of their customers to their default utility, in response to the end of customer credit funding for large customers.

## Renewable Generation Supply and Demand

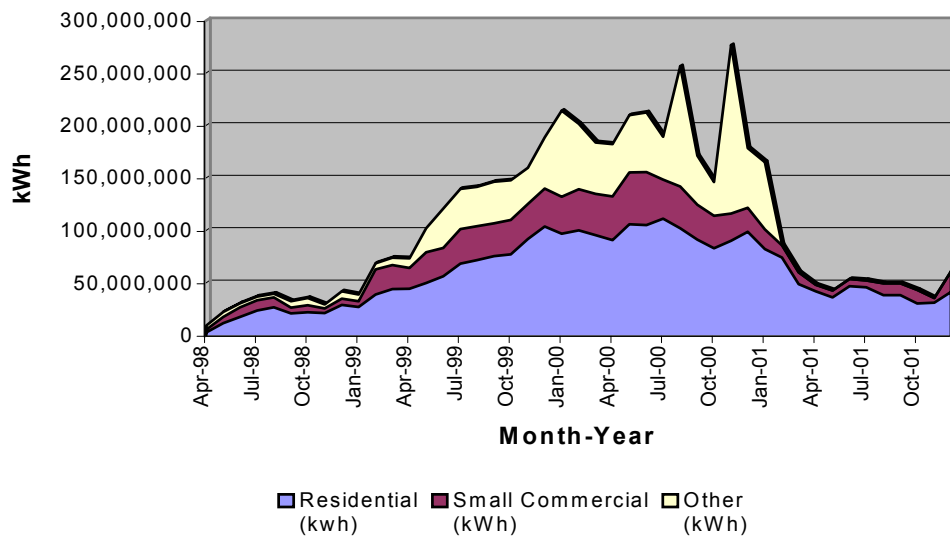
To date, the electricity eligible for customer credit has been generated by geothermal, biomass, small hydro, landfill gas, and some wind facilities. Table 1.2 indicates the relative percentages of fuel types used to produce electricity that was eligible for customer credit from the beginning of the program in April 1998 through 2001. Generation data were aggregated for all active providers and products.

**Table 1.2**  
**Eligible Generation by Fuel Type**

Calendar Year	Geothermal	Biomass	Small Hydro	Wind	Landfill Gas/Other	Total
<b>1998</b>	82%	8%	10%	0%	0%	100%
<b>1999</b>	79%	16%	3%	2%	0%	100%
<b>2000</b>	77%	16%	3%	2%	2%	100%
<b>2001</b>	88%	8%	1%	2%	<1%	100%

In 2001, geothermal energy dominated the renewable energy market and accounted for 88 percent of eligible purchases. The predominance of geothermal was partially attributable to the decrease in the number of active providers, as those that remained in the market relied almost solely on geothermal purchases.

The amount of renewable electricity delivered to customers eligible for customer credits generally increased from April 1998 through the spring of 2000 for all customer classes, but then declined, reflecting disruptions in the market, as shown in Figure 2.



**Figure 2**  
**Load by Customer Class**

The volatility evident for the large customers, in particular, was a result of various factors, but the volatility typically reflected having met the \$1,000 annual cap on payments per large customer. The \$15 million cumulative cap on payments allowed for large customers was met in April 2001, after which time this particular class of customers no longer received customer credits. Consequently, payments from April 2001 through December 2001 were only made for residential and small commercial customers.

Subaccount activity has declined since mid-2000, as indicated by the number of customers receiving customer credit, the amount of customer credit funds received, and the amount of eligible renewable electricity consumed.

## Expenditures

For payments during 1998-2001, registered renewable providers submitted monthly data to the Energy Commission on eligible generation and sales to consumers, which were used to calculate payments from the Customer Credit Subaccount. An important factor in the payment calculation is the cents per kWh credit level.

At the start of the program, the Energy Commission set the credit level at the program's maximum amount of 1.5 cents per kWh to encourage market development. However, beginning in late 2000, market growth led the Energy Commission to reduce the credit level over the duration of the program as a way to extend the funding availability for customer credits. Since December 2000, the credit level has remained constant at 1 cent/kWh.

Monthly disbursements were very volatile during the last 2000 and 2001, but decreased considerably in 2001. Changes in the market, along with no payments to large customers,

resulted in the Subaccount becoming under-subscribed in 2001. In view of the significant increase in the Emerging Renewable Resources Account activity, the Energy Commission reallocated \$10 million in funds from the Subaccount to the Emerging Account in September 2001.

Table 1.3 summarizes the Customer Credit Subaccount financial activity for 1998 through 2001, indicating a balance of \$6.7 million of funds remaining at the end of the four-year program. Total funds distributed from the Subaccount are lower than funds for customer credits passed on to customers because some providers banked customer credits that were ineligible for payment until the provider's purchases matched eligible generation.

**Table 1.3**  
**Financial Summary**

<b>Payment Year</b>	<b>Payments (\$ millions)</b>	<b>Allocation (\$ millions)</b>	<b>Funds Remaining (\$ millions)</b>
<b>1998</b>	2.5	10.8	8.3
<b>1999</b>	16.2	16.2	8.4
<b>2000</b>	26.9	21.6	3.1
<b>2001<sup>1</sup></b>	12.0	27.0	18.1
<b>2001<sup>2</sup></b>	1.4		6.7

<sup>1</sup>In September 2001, \$10 million was transferred from the Customer Credit Subaccount to the Emerging Account.

<sup>2</sup> Because of the lag-time between when registered renewable providers serve their customers and when they invoice the Energy Commission, 2002 payments to date reflect sales by providers for electricity consumed in year 2001.

## **Subaccount Activity and Status**

The retail market for renewable electricity has been contracting, as shown by the fall in the number of customers receiving the customer credit, reflecting the decrease in the amount of renewable electricity consumed and the decrease in expenditures from the Subaccount. Changes in the market, particularly the suspension of direct access, make new growth in the demand for program funding unlikely, at least in the near future. With the suspension of direct access in September 2001, no incremental customers may select renewable energy offerings and take advantage of the credit; hence the growth of the renewable energy market has ceased, and as suppliers leave the market, California's renewable energy market is suffering a slow attrition.

During year 2002, the direct access market continued to decline in response to California's energy crisis, and activity in the Customer Credit program slowed proportionately. However, the structure for implementing the program remained relatively unchanged through December 2001. The Energy Commission did not make customer credit payments on 2002 activity because of uncertainties over potential changes in statute that could modify eligibility

requirements for customer credits. While the number of customers and providers participating in the program has decreased, some customers continued to receive renewable electricity from registered electric service providers throughout 2002 with the expectation that customer credits would be extended through pending legislation. This expectation was supported by an Energy Commission staff letter to program participants in March 2002 (see Appendix 2).

MPRs have not been received for the entirety of 2002 activity, as payments were not authorized for this time period. Complete data on the number of customers that remained in the market in 2002 and purchased energy available for customer credits are unavailable. The staff's preliminary accounting for 2002 activity projects over \$5.4 million in payment requests for residential and small commercial customers and \$8.8 million for large customers.

## **CHAPTER 2    Status and Trends in Renewable Energy Markets**

This chapter summarizes the status and trends in renewable energy markets as they apply to the Energy Commission's Customer Credit program. The chapter covers three subject areas that particularly define the current status and outlook for consumer choice in California's competitive renewable energy market.

- The direct access market
- Implementation of California's Renewable Portfolio Standard (RPS)
- Tradable renewable energy certificates

### **Direct Access Market**

The following section looks at the status and drivers of the direct access market in California, assessing a range of potential demand for Account funds given the existing set of direct access customers and the rules that govern them. Depending on the outcome of CPUC and legislative decisions, direct access customer demand could diminish further or expand. Adjustments to either customer or product eligibility could expand the demand for Customer Credit funds. However, for participation in the Customer Credit program to use or exceed the 10 percent allocation in SB 1038, either direct access must be reinstated, or Account eligibility rules must be adjusted. Both of these options require legislative action.

### **Background**

On February 1, 2001, Assembly Bill 1X (AB 1X, Keeley, Chapter 4, Statutes of 2001) directed the CPUC to suspend the right of retail end-use customers to purchase energy, renewable or otherwise, from direct access contracts, but did not specify the suspension date. After AB 1X passed, the CPUC continued to honor direct access service requests and allow new customers to sign direct access contracts with providers. Most direct access service requests, however, were requests to return customers to their default utility.

In the summer of 2001, the percentage of load served by direct access providers increased substantially from a low of about three percent during the energy crisis in early 2001 to about 14 percent of IOU load when the CPUC suspended new direct access transactions on September 20, 2001. The increase came mainly from larger commercial and industrial customers who chose lower-priced electricity options in preference to the electricity offered by the IOUs under the higher rates authorized by the CPUC in 2001. Historically, these customers did not participate in the Customer Credit program to the extent that residential customers did, in part because their ability to do so was limited by statute. Therefore, Account participation did not increase when direct access surged, as the residential side did.

On September 20, 2001, the CPUC suspended the direct access market such that new customers could not enter into direct access contracts after that date.<sup>7</sup> On March 21, 2002, the

CPUC issued D.02-03-055, which confirmed the September 20, 2001 suspension date and discussed applying a potential exit fee or direct access surcharge for customers who entered direct access contracts before the suspension date. The decision also contained some key rules for the direct access suspension: direct access contract assignments and renewals are allowed, as are customer moves, but add-ons of new load under existing contracts are not.

The CPUC also took action in related proceedings that affect direct access customers, in particular, the level of direct access customer surcharges. These include the following:

- D.02-07-032, Southern California Edison Company's (SCE) Historical Procurement Charge Interim Decision<sup>8</sup>
- D.02-11-074, (replacing D.02-10-063) Department of Water Resources (DWR) Bond Surcharge Calculation Methodology Decision<sup>9</sup>
- D.02-11-022, Direct Access Cost Responsibility Surcharge (Exit Fee) Decision<sup>10</sup>

The Exit Fee Decision established a rate cap for direct access customers inclusive of all charges, including SCE's Historical Procurement Charge and the Bond Surcharge. Initially, that cap has been set at 2.7 c/kWh. The CPUC expects to reevaluate the level of the cap by July 1, 2003.

To date, those customers with contracts in place before September 20, 2001 may continue to be served through the direct access market. The CPUC has maintained a policy that direct access market should remain viable,<sup>11</sup> consistent with the intent of AB 1X that contracting for direct access be suspended rather than undermine customer choices made prior to suspension. However, legislation is required for direct access contracting to reopen in California.

## **Potential Reductions or Expansion in Direct Access Load**

The future level of direct access load is not predictable because the basic economics of direct access remain unclear. Regarding potential reductions, the CPUC has ordered a cap imposed on exit fees, but the level of the cap will be reevaluated by July 1, 2003 and could increase. Even at the current cap level, some contracts may prove uneconomical and drive customers to return to bundled utility service. In addition, the CPUC is reviewing the procedures for calculating the credit direct access customers receive from the utility for avoiding generation procurement, which could have a positive or negative impact on the economics of direct access customers. The CPUC is also considering other changes to programs and tariffs, such as the demand response proceeding (R. 02-06-001), that could draw direct access customers back to utility bundled service.

Direct access eligibility rules related to the suspension of contracting also remain contested. For example, total direct access load is guaranteed to decline because over time some customers will move out of a service territory, close a business location, or otherwise cease service. However, some parties are now in the process of attempting to modify the CPUC's decisions to allow a customer with a set of locations to replace direct access load that ceases service with load from another location without direct access service.

Two factors make it difficult to predict the future level of direct access load: the resolution of direct access market rules, eligibility, and fee structures, and the unknown implications of California's RPS program on direct access customers and suppliers. The difficulty is exacerbated by the generally confidential nature of direct access contracts. In one scenario, demand for customer credit funds could dwindle to zero if exit fees or other rules drive existing eligible customers back to utility bundled service. In another scenario, the existing demands on funds could remain, with increasing demands from the existing non-residential, non-small commercial customers, up to the limits set in SB 1038.

In addition, the funding limits set in SB 1038 are further subject to interpretation. SB 1038 limits eligibility for customer credits to customers that entered into a direct transaction on or before September 20, 2001, for purchases of electricity produced by registered in-state renewable electricity generating facilities. One interpretation of this language is that only customers who had direct access contracts specifying eligible renewable resources can participate in the Account. In this case, Account participation is capped at current levels and likely to decrease over time as customers move out of a service territory or otherwise drop their service. An alternate interpretation of the language is that any customer with a valid direct access contract prior to the suspension date can purchase eligible renewable power and participate in the Account. In this case, the current level of demand could increase in 2003 subject to the interaction between the other participation limits in the bill and the current makeup of direct access customers.<sup>12</sup>

The direct access load could expand if and when the ability to enter into new direct access contracts is reinstated. In that case, however, SB 1038 will continue to limit customer credits to direct access customers with contracts prior to the suspension date. Thus, changes in section 383.5 of the Public Utility Code would be required to expand eligibility to these potential new direct access customers.

## **Account Eligibility Adjustments Could Expand Demand for Customer Credit Funds**

Funding eligibility might be expanded by customer category or product category. Participation in the Account could increase substantially if all current direct access customers purchased enough eligible renewable energy to take full advantage of their legal ability to receive customer credits. If participation continued at the same level as at the end of 2001, the Account would disburse over \$5 million per year, mostly to residential customers. If participation increased because all existing direct access customers who were eligible to participate did so, payments from the Account could surge until the larger customers reached their legal limit of the \$13.5 million from the Account. This level of participation would represent on average over \$8 million per year in Account payments, compared with the \$13.5 million annual allocation.

## **Adjustments in Customer Eligibility**

The funding eligibility could expand to a broader group of retail customers as a result of several factors, including revoking of direct access suspension, implementing the Community Aggregation Bill, Assembly Bill 117 (AB 117, Migden, Chapter 838, Statutes of 2002), or reopening direct access in full or partial form by new legislation.

However, before legislative action is taken, the CPUC will determine, to a great extent, the potential for growth in the competitive retail market, and any subsequent demand for funds, in its procurement proceeding, R.01-10-024. This proceeding addresses the utilities long-term procurement plans.

Several factors will undergo consideration in this proceeding. The scale and length of the DWR and other long-term contracts will dictate the load reductions available to utility bundled service without additional stranded costs. Energy efficiency, demand response, distributed generation, and direct access contracting may all effectively compete for load expansion opportunities

Many customer representatives are pushing to continue retail direct access<sup>13</sup> or proposing alternative programs to expand customer choice. Depending on decisions at the CPUC or the Legislature, large customers may be offered direct access choice again while smaller customer classes are not. Currently, larger customers have access to Customer Credit funds but are limited in total funding and funds per customer per year may persist. The demand for funds could increase if the caps are relaxed on the annual funding per large customer and the limit on the total funds going to the large customer category.

AB 117, the Community Aggregation Bill, has spurred interest from small customer advocates seeking alternative electricity choices. This bill authorizes multiple end-use customers to aggregate their electrical loads and purchase energy from an ESP through community choice aggregators as members of a local community. Exit fees may apply. The Customer Credit Account was set up to focus resources on small end use customers, and when AB 117 is implemented, growth in demand for customer credit support could be strong, should adjustments be made in eligibility rules to allow it. As an example, the Northeast Ohio Public Energy Council,<sup>14</sup> an aggregation comprising about 400,000 residential customers, competitively procured electric service and is being served with a cleaner energy blend than the default service offered by the utility. The Account could serve as a stimulus for community aggregation around renewable energy choices. This option suggests a strategy to reserve funds or defer allocation decisions pending CPUC findings and decisions with respect to AB 117.

The Legislature will determine whether and when to adjust statutory eligibility requirements for customer credits. Adjustments in customer eligibility driven by changes in direct access rules or law could quickly and sharply increase demand for some form of customer credit support.

## **Adjustments in Product Eligibility**

In the past three years, customer-driven demand for renewable energy has spread in the United States, due in part to the early success of competitive renewable energy retailing in California. The National Renewable Energy Laboratory (NREL) concludes that competitive retail renewable energy products are available in eight states, regulated green pricing programs are available in about 200 utility service territories in 32 states nation-wide. Customers now have access to renewable energy products from competitive retail suppliers or through a utility green pricing program.<sup>15</sup> The NREL calculates that 400,000 customers are now purchasing green power and more than 1,000 megawatts (MW) of new renewable power plants are installed or planned to serve the combined customer-driven demand in the three primary markets: the competitive retail market, the regulated utility green-pricing market, and the national retail green tag (renewable energy certificate) market.

The widespread entry of competitive renewable energy products in California since 1998 also stimulated the development and trading of RECs or green tags as a market tool and convention. In the last two years, the green tag market has burgeoned; the wholesale renewable energy market now functions almost exclusively on a green tag basis. Customers in all states have access to retail green tags from about a dozen companies. (The growing use of RECs in both the wholesale and retail energy markets is developed in more detail in a later section of this report.)

Today, California customers can buy retail green tags products in small volumes from a variety of vendors. Because green tags can be sold separately from commodity electricity, a customer can remain with bundled utility service and still buy green tags to support renewable energy. Thus, expanding the products eligible for Account funds to include green tags would not require changes to direct access rules and could increase California's demand for renewable energy. Whether or not green tag vendors are drawn to California depends on the CPUC and Legislature resolving major regulatory uncertainty in the electricity market generally and rules specific to renewable energy markets specifically, and whether customer credit funds will be made available to support green tag sales in California. One of the key regulatory issues for tag vendors is the development and implementation of a registry and accounting systems for renewable energy in California.

## **Implementation of California's Renewable Portfolio Standard**

Multiple implementation questions need to be resolved involving integrating the RPS with Energy Commission requirements under SB 1038, provisions for Public Goods Charge (PGC) awards from SB 90, and developing a tracking, verification, and accounting system. Each of these influence how Account funds may be used effectively.

## Overview

SB 1078 created the state's new RPS. California's RPS requires retail sellers of electricity to increase the renewable content of their energy deliveries by an average of one percent per year over a baseline level existing on January 1, 2003 as determined by the CPUC. The requirement of an annual increment continues until renewable energy comprises 20 percent of the energy portfolio, a target that must be achieved by December 31, 2017. To achieve the targets, retail sellers must stimulate new investment in renewable energy resources, either by third party, non-utility developers who contract for energy deliveries or by the retail sellers themselves (direct investment). The key to meeting these targets will be the availability of PGC funds and policies adopted to guide their allocation.

The CPUC's Procurement Rulemaking, R.01-10-024, will guide utility procurement of renewables. Among the issues to be addressed in implementing SB 1078 are the following:

- A process to provide criteria for rank ordering and selecting least cost and best fit renewable resources,
- Flexible compliance rules,
- Standard terms and conditions to be used by utilities in contracting for renewables, and
- A process for determining market price

By June 30, 2003, the CPUC, in collaboration with the Energy Commission, is expected to establish implementation rules governing utilities' procurement and retail sellers subject to RPS requirements.

Developing a balanced generation portfolio involves optimizing the Energy Commission's allocation of PGC funds. Essential to this outcome will be the process for allocating and awarding supplemental energy payments (SEPs) to eligible renewable resource providers to cover the above-market costs. Developing flexible compliance rules, which may incorporate trading of RECs, relates directly to the Energy Commission's role in registering eligible resources and monitoring their output. The CPUC is directed to open a rulemaking to develop requirements for Community Choice Aggregators (CCAs) and ESPs. This process may affect the Energy Commission's allocation of PGC funds and its tracking of generation output. The rules applying to CCAs and ESPs will especially influence the viability of customer-driven demand and, hence, the effective use of Account funds.

## Compliance and Accounting Requirements

SB 1078 gives the Energy Commission the authority and responsibility to design and develop an accounting system to track RPS compliance, to prevent double-counting of renewable energy output, and to verify product claims inside or outside the state. The RPS accounting system is expected to also be used for verifying retail product claims in California or other states as needed, overlapping with the Energy Commission existing mandate to implement Senate Bill 1305 (SB 1305, Sher, Chapter 796, Statutes of 1997). Thus, the accounting system would logically be designed and used to verify compliance with the state's power source

disclosure requirements under SB 1305 and to monitor the possible future disbursement of funds from the Energy Commission's New Renewable Resources Account, in addition to tracking baseline existing and new renewable resource generation for RPS compliance.

The use of tradable RECs and inter-year banking are among the compliance options the CPUC, in collaboration with the Energy Commission, is considering. Both the Power Source Disclosure and the current Customer Credit program guidelines allow for the use of wholesale green "tickets" or certificates, provided that certain conditions are satisfied. Tickets must be prepared, documented, and accounted for using the Energy Commission's pilot "Genreport Certificate" program. The specific features and restrictions of this program are detailed in the guidebook and regulations governing these programs, but were designed to allow flexibility without creating undue differences between the reporting requirements of the two programs. Limited intra-year banking is allowed. Retail trading of eligible tickets is not allowed. Once the CPUC and the Energy Commission have resolved issues associated with tradable RECs and RPS compliance, the Genreport certificate program and related guidelines may require revisions.

## **Tradable Renewable Energy Certificates**

This section addresses the use of RECs as an accounting and commercial trading tool and their potential application in California's renewable programs. This section briefly describes how such a system would work, the potential benefits of using RECs, and reviews programs and progress in other states as well as national initiatives.

Assuming a viable and robust retail renewable energy market, one option to effectively use Account funds would be extending Customer Credit program eligibility to transactions involving retail RECs. Such transactions can be available to customers to support renewable energy without requiring a direct access contract. Legislative change, however, would be required for this option to be put in place.

## **Background**

RECs represent the separable bundle of non-energy attributes (environmental, economic, and social) associated with generating renewable electricity. A REC is created for every unit of renewable electricity output (usually denominated in MWh), and no more than one REC can be created for any given unit of generation. In this report, we use the term REC in its broadest definition to mean simply the attributes of a given unit of renewable generation, separated from the underlying electrical energy.

Tradable RECs, also referred to as green tags or green tickets, are used throughout the world for two primary purposes: 1) as an accounting mechanism to verify compliance with renewable energy or air quality mandates and 2) as a commercial mechanism that allows more liquid trading of renewable energy attributes separate from the commodity energy generated by a renewable power plant. In both cases, a REC creates a unique and easily verifiable claim to renewable generation attributes.

An important factor contributing to the growth of retail green tags is the recent availability of programs and certification opportunities that welcome green tags as a legitimate way to support renewable energy and provide positive environmental benefits. The Center for Resource Solutions, an independent not-for-profit, which certifies green power products, now certifies green tags.<sup>16</sup> The United States Environmental Protection Agency (U.S.EPA) Green Power Partnership allows partners to qualify by purchasing green power products or green tag products.<sup>17</sup> The U.S. Green Building Council, which administers the LEED<sup>TM</sup> rating system, has recently revised its green power eligibility rules to allow green tags to qualify for one of 17 energy related rating credits.<sup>18</sup>

RECs are a convention in the wholesale and retail renewable energy markets. The vast majority of wholesale renewable transactions today include a REC transaction. All registered wholesale renewable transactions in Texas and New England employ RECs, as have the majority of wholesale renewable transactions in the Mid-Atlantic and the Pacific Northwest regions, which have been dominated by wholesale tag players like Community Energy, PacifiCorp Power Marketing, and Bonneville Environmental Foundation.

## **An Accounting Mechanism for Renewable Transactions**

RECs can be used simply as a verification tool or relied upon as the primary accounting mechanism for government entities implementing RPS policies. Though not used for RPS compliance purposes, the Energy Commission was the first regulatory agency in the U.S. that recognized RECs by allowing their use for verification purposes for the Customer Credit and Power Source Disclosure programs. The Automated Power Exchange's (APX), California's green tags market, has been in operation for four years and has been a one-stop-shop for retailers or customers looking to purchase RECs and generators or wholesalers seeking to sell them.

A significant strength of the use of RECs is their ability to be separated in time and geographic location from the electricity that is produced. A utility, ESP, or community aggregator could build or sign a long-term contract with a renewable energy facility and not have to worry about careful matching of load profile or geographic location for the purpose of RPS compliance.

The rapid adoption of RECs for regulatory and commercial purposes stems, in part, from the mismatch of renewable generation and consumption profiles. Most renewable energy requirements (and customer demands for renewable energy) include an annual compliance demonstration; thus a minute-by-minute match of renewable generation and consumption is unnecessary. For their part, RECs provide a flexible mechanism for intra-year banking of renewable generation attributes that compensates for the fact that renewable energy cannot be easily stored to match a specific customers' load and that some renewable resources are intermittent. In some cases, inter-year banking of RECs is allowed, and RECs make such banking easy to track.

By tracking a REC through intermediate transactions from the renewable generator to the distribution utility, state regulators can easily determine whether a load serving or distribution utility has met its renewable energy mandate. RECs can be used for accounting purposes whether RECs are transacted separately from or bundled with electricity, although a principal benefit of RECs comes in their ability to be transacted separately from electricity. This latter feature in particular allows RECs to be applied to either wholesale or retail transactions.

Presently, eight states use or plan to use RECs for RPS compliance purposes: Arizona, Nevada, Texas, Massachusetts, Maine, Connecticut, New Jersey, and Wisconsin. The Texas and New England systems are currently the most well developed and advanced of these systems. Other countries that have developed RPS policies have universally turned to REC systems to monitor and verify compliance with those policies, e.g., Australia, the United Kingdom, Italy, and Belgium.

## **National And Regional Tracking Initiatives**

RECs can be generated and claimed by any renewable generator inside or outside an official system. A central registry, or “issuing body,” ideally generates official certificates, electronically or on paper, assigning property rights to the generator for the RECs. Because RECs are intangible, a central registry allows the meter data from facilities to be verified independently and confirm electricity and thus generation of the certificate. The registry also creates a unique identification code for each certificate to verify that certificates are not sold in multiple locations. This registry, or another entity, may serve as a repository of “retired” or “consumed” RECs, as well as a clearinghouse or trading platform for RECs purchases and sales.

The U.S.EPA is funding work to establish a North American Association of Issuing Bodies (AAIB), including the establishment of a governance structure for the AAIB and the development of the agreements governing the interaction of the issuing bodies with AAIB and with each other to ensure compatibility of information transfer between Issuing Bodies. Such coordination is required to confirm that RECs independently retired in one system are not also being retired in another system.

The Energy Commission is participating in the Western Governors’ Association process to establish a comprehensive Western RECs system to match the Western Electricity Coordinating Council (WECC) electricity market territory. A formal infrastructure to use and trade RECs within the western states will be vital to California's accounting and compliance requirements under the RPS.

## **Tradable Certificates: Other State and Regional Programs**

As states begin to move towards public policies supporting renewable electricity, new systems have to be created. Currently, a few states and regions have developed a tracking and verifying system to help ensure that public policy goals are being met.

One example is Texas, where the Electric Reliability Council of Texas is responsible for tracking and verifying tradable renewable certificates (TRCs) that may be used to meet the Texas Renewable Portfolio Standard obligations. A robust retail TRC market is also functioning in Texas in parallel with the state's mandated RPS.

The second example is the New England region, where the New England Generation Information System tracks and verifies certificates that are used to meet the renewable claim obligations of New England states that are participating in the program. The tracking and verification systems implemented by the states and regions are designed to ensure that policy objectives are attained, but also help to establish credibility and provide consumers with confidence that claims regarding renewable electricity are not fraudulent. Appendix 1 describes in detail the systems developed for both Texas and the New England region.

## **Utility-Billed Competitive Green Pricing Options**

Competitive green pricing options are programs operating in regulated markets in which competing green power offerings are made available by and through the utility and are invoiced through the utility bill. These contrast with the green tag or REC options in which the attributes associated with green power are purchased by customers independent of their electricity purchase (and paid for via a separate bill). The latter options can suffer from their disconnection from electric service; the purchase of a green tag may be perceived as akin to a charitable contribution rather than a product or service purchase. As a result, marketers have a greater educational burden and despite the limited experience in the green tag market, most observers expect mass marketed green tag products to have a lower market penetration than a product offered in association with the purchase of electricity, invoiced through the electric bill.

Appendix 1 includes a more detailed description of competitive green pricing alternatives and discussion of how the Customer Credit program might be applied to such a program. The evaluation concludes that the potential impact of customer credits combined with green pricing options includes greater marketer interest, reduced customer acquisition costs, ability to price at a more sustainable rate than in the absence of any support, and as a result, greater penetration/market transformation.

Appendix 1 also describes a hybrid green tag/green pricing option that could yield favorable results insofar as a hybrid option:

- Can be implemented to capture the benefits of competition in the absence of viable retail competition;
- Can combine the administrative ease of green tags with the credibility of a utility green pricing program.
- Has the potential for vastly superior market penetration (and lower customer acquisition and retention costs) compared to traditional green tag products sold independently of the distribution utility.

While such programs can be offered to both large and small customers, the advantages relative to a green tag market are greater for smaller customers, for whom one-on-one marketing is not typically used. Variations on the hybrid approach are operating in two jurisdictions: Oregon and the Niagara Mohawk Power Company service territory in upstate New York. Under both programs, customers are offered multiple green power choices from multiple vendors, in a utility and regulator authorized process, supported by marketing services provided by the distribution utility, and billed via the distribution utility bill.

In California's particular situation, a hybrid green tag/green pricing approach could hold greater promise than a green-tag-only market for building upon the green market supported by the Customer Credit program under direct access. A hybrid program could provide a mechanism to nurture the demand that has already been tapped, serving as a smooth transition to the possible future reopening of direct access or providing a substitute means for developing a green power market in the absence of direct access. Expanding product eligibility to encompass competitive green pricing would require statutory change and alter the fundamental concept and design of the Customer Credit program.

## **CHAPTER 3 Scenarios, Options, and Recommendations**

This chapter discusses various scenarios and options for the Customer Credit program, along with the Energy Commission staff's recommendations.

### **Renewable Energy Program and Customer Credits**

As noted previously, SB 1038 extended the REP with the intent to ensure a portfolio of funding methods for existing, new, and emerging renewable energy technologies. In its first four years, the Subaccount program maintained a prominent role in developing and supporting of a customer-driven market, encouraging the sale of renewable energy outside of utility contracts. Customer credits proved to be a successful strategy until electricity prices rose, market volatility increased, and direct access rules changed.

SB 1038 authorized continuing the Customer Credit program as structured in 1998-2002, largely as recommended in the Investment Plan. SB 1038 allocated 10 percent of overall funding to the program for a total of \$13.5 million annually and continued the cents/kWh incentive structure. The current law restricts eligibility to customers who entered into direct access contracts on or before September 20, 2001 and strictly prohibits use of funds for purchases to meet RPS obligations. The Investment Plan had recommended limiting the eligibility of purchases from any existing in-state renewable facility over time in order to foster the market for new generators and urged stricter requirements regarding informing customers that they are purchasing renewable electricity and receiving credits.

The Energy Commission must now reexamine whether continued customer credit funding is likely to produce a significant impact on future renewable energy market development, stimulate the marketing of new renewable energy products by eligible suppliers, or materially contribute to a self-sustaining demand for renewable energy outside of utility procurement. Considerable uncertainty surrounds the prospects for direct access and renewable energy markets operating within California, now driven by the RPS. The issues are complex and the viability of a customer-driven renewable energy market in California cannot be predicted or assumed.

The demand for customer credit funds must also be considered within the overall demand for REP funding, including implementation of California's RPS. The Energy Commission must recommend whether and when to transfer funds from Accounts with lower demand to Accounts with higher demand, gauging the relative value of funds going to the different accounts. At this time, the staff considered several scenarios and options in evaluating the effective uses of Customer Credit funds to meet SB 1038 objectives.

## Scenarios and Options

This section discusses various scenarios and options for the Customer Credit program, which are categorized into four principal areas:

- Continue the Customer Credit Program
- Discontinue the Customer Credit Program
- Specific Treatment for eligible 2002 consumption
- Reallocate Customer Credit Funds

### Continue the Customer Credit Program

This option follows the conclusion that there is high value in continuing customer credit support for the retail renewable energy market with payments to eligible direct access customers. Continued funding is justified, either consistent with current direct access rules and the limitations of SB 1038 or subject to adjustments in customer, product, and supplier eligibility. Continued support could be conditioned to restrict customers to purchases from eligible suppliers of **new** renewable generation only (and generation in excess of that required by the RPS).

Various adjustments could be proposed that translate to an effective use of funds, including:

- Continue program as is, supporting existing direct access customers at a level equal to the funding cap on the Existing Renewable Resources Account or 1 c/kWh, until direct access suspension is revoked or modified.
- Beginning in January 2003 (or other date), condition/restrict customer credit funds to purchases from **new** renewable energy sources.
- Relax funding limits for large customers to support expanded demand for renewable energy among existing direct access customers.
- Adjust customer eligibility rules to respond to changes in direct access or RPS implementation (e.g., rules for ESPs and community choice aggregators).
- Adjust product eligibility rules to expand support to retail RECs, allow RECs to directly qualify for customer credits directly (or through utility program).

Alternative programs to support customer demand for renewable energy could be considered, replacing the current structure of the Customer Credit program. These options involve support for developing and expanding the renewable energy market (and generation in excess of that required by the RPS) by virtue of supporting either the developing "green tags" market in the absence of direct access or one or more competitive "green pricing" options available through the distribution utility's billing.

The Customer Credit program eligibility requirements could be redefined to support the (limited) use of retail RECs directly in the absence of direct access. Eligibility could be conditioned on the purchasing of new renewable generation only and not credited to RPS

obligations. Utility-billed, competitive green pricing programs could be supported under a redefined Customer Credit program. Any of these options would require statutory changes.

## **Discontinue the Customer Credit Program**

The option of ending the Customer Credit program and shifting funds to other accounts is justified on the basis of the numerous uncertainties and the lack of evidence or demonstration that the program has the potential to increase California's renewable energy supply over the long term. Specifically:

- Customer credits provided limited indirect support to renewable energy generators during the initial four-year program.
- Continued customer incentives cannot be demonstrated to be a cost-effective strategy or market tool having significant impact to drive **new** resource development at present or in the longer term.
- The Energy Commission staff has no basis for determining that customer credits will be more effective at supporting renewable resource development than an equivalent amount of funds provided in the form of SEPs to support the RPS.

By ending the program, the Energy Commission would be ceasing further direct encouragement of the retail renewable energy market. The consequences are likely to be disappearance of retail marketing of renewable energy to several customer classes.

## **Specific Treatment for Account Activity During 2002**

Whether the program is continued or discontinued, a number of providers continued to serve eligible customers through 2002 with renewable electricity and passed on customer credits, with the expectation that customer credits would be paid

Though based on the staff's preliminary accounting of 2002 activity, funding requests for payments to residential and small commercial customers are projected at \$5.2 million. Payments to large customers are excluded given that the \$15 million cumulative cap on payments for this class of customers was met in April 2001. Unused SB 90 funds, rolled over from 2001, appear sufficient to fund expected payment requests for eligible small and commercial customers at the 1¢/kWh level. (See Table 1.3.)

## **Reallocate Customer Credit Funds**

If the Customer Credit program were discontinued, funds allocated since January 2002 should be re-allocated to other REP Accounts. Alternatively, the program could be suspended indefinitely and re-allocation decisions deferred pending the determination of California's RPS implementation plan, compliance rules, and direct access market issues.

Re-allocation decisions should be considered in the context of the overall demand for REP funding. Presently, the status of the various REP accounts is as follow:

- The Emerging Renewable Resources Account had demand significantly greater than allocation of funds for the last two years, a situation that is expected to continue.
- Demands for increased funds may occur in the New Renewable Resources Account, but the level of that demand cannot be forecast until the rules are developed for RPS procurement. While the sufficiency of New Renewable Resources Account funding is not known, the use of these funds holds the potential of meeting RPS requirements for new renewable energy development.
- The Renewable Resources Consumer Education Account is charged with promoting renewable energy, disseminating information on renewable energy, facilitating consumer awareness and confidence in renewable energy sources, and helping to develop a consumer market for renewable energy

• As such, funds should be re-allocated to support the remaining customer-side Accounts, Emerging Renewable Resources and Renewable Resources Consumer Education, and the New Renewable Resources Account to ensure adequate support for new renewable energy resources.

In conjunction with demands for funding from the REP Accounts, particularly the New Renewable Resources Account, the California RPS creates an immediate need for funds to support the design and development of an integrated tracking, accounting and verification system, for which the Energy Commission is responsible. An option for the Customer Credit funds would be to support both the REP and RPS implementation through the design of a flexible accounting system that meets the RPS generation tracking and compliance requirements (including SEPs through the New Renewable Resources Account), at the same time anticipating the growing use of renewable energy credits trading in California, in step with regional and national initiatives. The accounting system can also be used to verify renewable energy content and heighten electricity customers' awareness of the contribution renewable power makes in their distribution utility's power mix.

A portion of the funds allocated for customer credits can be applied to the necessary development of a certificate-based statewide tracking, verifying, and accounting system, designed to serve multiple uses. Funds for the tracking and verifying system can be reallocated from the Customer Credit Renewable Resources Account to the Renewable Resources Consumer Education Account for this purpose. The accounting system can be designed and used for the following purposes:

- Existing Renewable Resources and New Renewable Resources Account tracking, (RPS, REP)
- Verifying generation, sales, claims, etc., [ REP (Customer Credit), SB 1305]
- Baseline and compliance accounting (RPS)
- In-state/out-of-state tracking capability, (RPS, REP)
- Anticipate introduction and use of wholesale and potentially retail RECs.

California lacks any formal infrastructure to use or track RECs, including how to treat RECs in statewide accounting and utility procurement. This issue will soon be the subject of a joint Energy Commission and CPUC inquiry.

## **Recommendations**

The Energy Commission REP staff has examined the history of the Customer Credit program and analyzed how changes in the direct access market affect the continuation of program pursuant to SB 1038. The staff recommendations are provided below.

### **Discontinue the Customer Credit Program:**

Upon examining the trends and status in the direct access market, in relation to the Customer Credit program, the staff recommends discontinuing the Customer Credit program. The prospects for a renewal in the direct access market are too uncertain at this time to justify continuing to allocate REP funds for this purpose. The intent of such funding would be to foster a growing market for renewable power, above and beyond the RPS requirements in the state. Without a clear picture that a growing market for renewable power can be fostered, there is little justification to allocating funds for this purpose. The staff believes that should the program continue the risk is great that the program will not have the intended effect because of the unclear future of retail direct access and customer choice.

### **Payment for Customer Credit Program Activity During 2002/2003**

On March 8, 2002, the staff distributed a letter indicating the Energy Commission's intent to continue Customer Credit payments either under the old program structure or through a new program structure to be established pursuant to implementing legislation. Since the staff is recommending discontinuing the Customer Credit program, no new program structure is proposed to calculate and make payments. To honor the intent of the March 8 letter, the staff recommend that retroactive payments be made for 2002 activity under the SB 90 program structure.

The staff also recommend that payments be made for eligible residential and small commercial consumption of renewable energy for the period January 1, 2002 through April 1, 2003, using the remaining funds in the SB 90 Customer Credit Subaccount. Table 1.3 indicates \$6.7 million in SB 90 funds remaining. Only residential and small commercial customers are eligible for retroactive payments, since the SB 90 cap on payments for larger customers has already been reached. Payments should be made at the incentive rate 1¢/kwh through March 31 or until unused SB 90 funds are exhausted, whichever comes first. Should the Commission adopt this recommendation, changes to the Customer Credit Subaccount guidebook would be enacted to allow payments in 2002 and January through March of 2003.

## Reallocate SB 1038 Customer Credit Funds

SB 1038 allocated 10 percent of the funds for the REP to the Customer Credit Renewable Resources Account. Should the Energy Commission adopt the recommendation to discontinue the Customer Credit program, these funds are no longer needed for this purpose. The staff recommends reallocating these funds as follows:

- 10 percent (at least \$1.35 million annually) to the Renewable Resources Consumer Education Account
- 45 percent (at least \$6.08 million annually) to the Emerging Renewable Resources Account
- 45 percent (at least \$6.08 million annually) to the New Renewable Resources Account

The staff recommend the reallocation of funds for the Renewable Resources Consumer Education Account for a specific purpose: to support and accelerate the scoping, design, and development efforts for the required RPS tracking, verifying, and accounting system, consistent with SB 1078 and SB 1038 requirements. This system would have the consumer purpose of establishing confidence that the renewable generation participating in the RPS, or otherwise in the REP, is verified and is participating in programs and contracts as expected, bringing the benefits of these renewable policies to consumers.

The Emerging Renewable Resources Account currently is allocated 17.5 percent of the REP funds, or about \$25 million annually. In 2001 and 2002, however, reservations for the Emerging Renewable Resources Account funds totaled close to \$50 million annually. Even with reduced rebate levels, this account appears to need additional funds. Reallocating Customer Credit funds for this purpose can meet this need, providing reassurance to the emerging renewables industry regarding the long-term availability of funds for this purpose.

The New Renewable Resources Account will be developed in 2003 to provide a source of SEPs for the RPS. Presently, the New Renewable Resources Account is allocated 51.5 percent of the REP funds or about \$70 million annually. Whether this level of funding is sufficient or insufficient for the meeting RPS obligations cannot be known at this time. Reallocating Customer Credit funds to the New Renewable Resources Account helps to ensure that the 20 percent goal embodied in the RPS policy can be achieved as scheduled, contributing to the development of **new** renewable resources in any event.

The Energy Commission is prohibited by statute from reallocating any funds to the Existing Renewable Account.<sup>19</sup>

# **APPENDIX 1**

## **CONSULTANT REPORT: Customer Credit Account Research and Analysis Supporting the California Energy Commission's Renewable Energy Program Preparation of the Customer Credit Account Report for the Legislature**

**January 23, 2003**

**Prepared by the XENERGY Contracting Team**

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To keep printing costs down, the XENERGY Consultant Report is available on the Energy Commission's website at [[www.energy.ca.gov/renewables/documents](http://www.energy.ca.gov/renewables/documents)]. For those preferring a hard copy of Appendix 1, please call the Renewable Energy Program Secretary, Janet Preis, at (916) 654-4530 or e-mail her at [[jpreis@energy.state.ca.us](mailto:jpreis@energy.state.ca.us)].

## **APPENDIX 2**

### **March 8, 2002 Energy Commission Staff Letter to Customer Credit Subaccount Participants**

(see following page)

## CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET  
SACRAMENTO, CA 95814



March 8, 2002

To: Customer Credit Subaccount Participants

Please be advised that payments from the Customer Credit Subaccount will be suspended for all load served after December 31, 2001. Sales of renewable electricity after this date that would otherwise qualify for the customer credit are expected to be eligible for payments under an extension to the Commission's Renewable Energy Program.

Assembly Bill 995 and Senate Bill 1194 authorized extending the program with modifications, but legislation authorizing the expenditure of funds collected under the extension has not been passed. In addition, certain eligibility provisions under the SB 90 program (for the years 1998-2001) differ from what is proposed for the program extension, and this may restrict what renewable resources qualify for the customer credit. As a result of these uncertainties, the Commission's Environmental and Energy Infrastructure and Licensing Committee has decided to suspend payments until legislation authorizing the expenditure of the extension funds has been approved by the Legislature.

We intend to make payments for any eligible sales of renewable electricity that occur after January 1, 2002 under the terms of the new legislation. If, however, the new legislation authorizes funding for only post-legislation retail sales (i.e. retail sales after the bill is enacted into law), then we intend to make payments for pre-legislation retail sales under the provisions of the SB 90 program, provided funding is available and the payments are not prohibited or otherwise contrary to the new legislation. Under either scenario, payments would require guideline changes, since the current guidelines for the Customer Credit Subaccount do not authorize payments for sales after December 31, 2001.

To qualify for any back payments, registered renewable providers may continue submitting their Monthly Performance Reports (MPRs) according to the following schedule, but a final schedule is expected to be adopted as part of the extension program guidelines:

Performance Period	Earliest Date to Submit MPRs	Latest Date to Submit MPRs
January 2002	April 10, 2002	May 10, 2002
February 2002	May 10, 2002	June 10, 2002
March 2002	June 10, 2002	July 10, 2002
April 2002	July 10, 2002	August 12, 2002

If you have any questions, please contact me at: voice, (916) 654-4735; fax, (916) 653-2543; or e-mail, [hraitt@energy.state.ca.us](mailto:hraitt@energy.state.ca.us).

Thank You,

Heather Raitt  
Renewable Energy Program  
Manager, Customer Credit Subaccount

# GLOSSARY

**Account** refers to the Customer Credit Renewable Resources Account as authorized under SB 1038

**Banking** refers to the ability of electrical corporations or utilities to apply excess procurement in one year to procurement obligations in subsequent years or inadequate procurement in one year to one or more subsequent years.

**Default utility** refers to the electric utility distribution company that owns the power lines and equipment necessary to deliver purchased electricity to customers and obligated to serve end use customers in the event wholesale or retail energy service providers cease service.

**Direct access** refers to the ability of a retail customer to purchase commodity electricity directly from the wholesale marketer rather than through a local distribution utility.

**Renewable Energy Certificate (REC)** represent the separable bundle of non-energy or non-commodity attributes (environmental, economic and social) associated with the generation of renewable electricity; the attributes of a given unit of renewable generation, separated from the underlying electrical energy. **Green tag, green ticket and tradable renewable certificate** are often used synonymously with REC.

**Stranded costs:** These are costs inherent in the existing electric utility industry rendered potentially unrecoverable in a competitive market.

**Subaccount** refers to the Customer Credit Subaccount of the Customer-Side Renewable Resource Purchases Account under SB 90.

## ENDNOTES

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<sup>1</sup> California Energy Commission, *Investing in Renewable Electricity Generation in California*, P500-00-022, 2001.

<sup>2</sup> The costs above a determined market price, up to caps on supply, are to be covered for 10 years of generation.

<sup>3</sup> California Energy Commission, *Annual Project Activity Report to the Legislature*, P500-02-068, December 2002.

<sup>4</sup> California Energy Commission, *Volume 4: Customer Credit Subaccount Guidebook* (Sixth Edition) P500-01-014V4, September 2001

<sup>5</sup> On December 20, 2000, the Commission allowed for the wholesale trading of renewable attributes to qualify for the customer credit, assuming that a matching amount of commodity energy is sold under a direct access contract and that all other program requirements are met.

<sup>6</sup> A wholesaler buys electricity and sells it to providers or acts as a broker in negotiating power sales to providers.

<sup>7</sup> California Public Utilities Commission, Decision D. 01-09-060,

<sup>8</sup> California Public Utilities Commission, Decision D.02-07-032,

<sup>9</sup> California Public Utilities Commission, Decision D.02-11-074,

<sup>10</sup> California Public Utilities Commission, Decision D.02-11-022,

<sup>11</sup> California Public Utilities Commission, Decisions D.02-03-055 (p.16) and D.02-11-022 (p. 109)

<sup>12</sup> SB 1038 limits credits awarded to members of the combined class of customers other than residential and small commercial customers. Credits may not exceed one thousand dollars (\$1,000) per customer per calendar year. In no event may more than 20 percent of the total customer incentive funds be awarded to members of the combined class of customers other than residential and small commercial customers.

<sup>13</sup> The Bay Area Economic Forum, "*California's Energy Future: A Framework for an Integrated Power Policy*," November 2002; identifies a spectrum of alternatives for retail electricity choice that are being used in other markets and available for application in California's electric public policy.

<sup>14</sup> Northeast Ohio Public Energy Council, <http://www.nopecinfo.org/>

<sup>15</sup> Swezey, Blair, National Renewable Energy Laboratory, "*Introduction to Regional Green Power Markets Reports*," presented to the 7<sup>th</sup> National Green Power Marketing Conference, September 30, 2002.

<sup>16</sup> Center for Resource Solutions, <http://www.resource-solutions.org>

<sup>17</sup> United States Environmental Protection Agency, <http://www.epa.gov/greenpower>

<sup>18</sup> United States Green Building Council, <http://www.usgbc.org>

<sup>19</sup> Public Utilities Code Section 383.5(i)